In the Claims

Please amend claims 1 and 18 as follows:

1. (currently amended) A method of simulating operation of a production system comprising a first set of at least one tool controlled by a second set of at least one tool, the method comprising:

receiving a quantity of time during which the second set of at least one tool is not able to control the first set of at least one tool; and

simulating operation of the production system by calculating at least one production quantity affected by the first set of at least one tool responsive to the quantity of time received.

- 2. (previously presented) The method of claim 1 wherein the quantity of time received is a quantity of time at least one of the at least one tool in the second set is not operational.
- 3. (previously presented) The method of claim 1 wherein at least one of the at least one tool in the first set comprises a production processing tool.
- 4. (original) The method of claim 1 wherein the quantity of time comprises a percentage.

- 5. (original) The method of claim 1 wherein the production quantity comprises a throughput.
- 6. (original) The method of claim 1 wherein the production quantity comprises a good unit equivalents produced per unit of time.
 - 7. (original) The method of claim 1 wherein:

the production process comprises a plurality of sets of at least one tool, comprising the first set and the second set and a third set; and

the production quantity is additionally calculated responsive to a quantity related to the third set of at least one tool.

- 8. (original) The method of claim 7 wherein the production quantity comprises at least one selected from:
- a number of products provided to at least one of the plurality of sets of at least one tool; and
- a number of products provided by at least one of the plurality of sets of at least one tool.
- 9. (original) The method of claim 7 wherein the production quantity comprises:
- a number of products provided to at least one of the plurality of sets of at least one tool; and

- a number of products provided by at least one of the plurality of sets of at least one tool.
- 10. (original) The method of claim 7 wherein the production quantity comprises an amount of time at least one of the plurality of sets of at least one tool takes to process a unit produced by said at least one tool.
- 11. (original) The method of claim 7 wherein the production quantity comprises an average amount of time at least one tool in at least one of the plurality of sets takes to process a unit produced by said at least one tool in the set.
- 12. (original) The method of claim 7 wherein the production quantity comprises a number of tools in at least one of the plurality of sets of at least one tool responsive to at least one capacity.
- 13. (original) The method of claim 7 wherein the production quantity comprises a percent of utilization of the at least one tool in at least one of the plurality of sets.
- 14. (original) The method of claim 7 wherein the production quantity comprises a number of sets performing a same step in the production system in the plurality of sets.

- 15. (original) The method of claim 14 wherein each of the number of sets comprises a same number of tools.
- 16. (currently amended) A computer program product comprising a computer useable medium having computer readable program code embodied therein for simulating operation of a production system comprising a first set of at least one tool controlled by a second set of at least one tool, the computer program product comprising computer readable program code devices configured to cause a computer to:

receive a quantity of time during which the second set of at least one tool is not able to control the first set of at least one tool; and

simulate operation of the production system by

calculating calculate at least one production quantity

affected by the first set of at least one tool responsive

to the quantity of time received.

- 17. (previously presented) The computer program product of claim 16 wherein the quantity of time received is a quantity of time at least one of the at least one tool in the second set is not operational.
- 18. (previously presented) The computer program product of claim 16 wherein at least one of the at least

one tool in the first set comprises a production processing tool.

- 19. (original) The computer program product of claim
 16 wherein the quantity of time comprises a percentage.
- 20. (original) The computer program product of claim
 16 wherein the production quantity comprises a throughput.
- 21. (original) The computer program product of claim
 16 wherein the production quantity comprises a good unit
 equivalents produced per unit of time.
- 22. (original) The computer program product of claim 16 wherein:

the production process comprises a plurality of sets of at least one tool, comprising the first set and the second set and a third set; and

the production quantity is additionally calculated responsive to a quantity related to the third set of at least one tool.

23. (original) The computer program product of claim 22 wherein the production quantity comprises at least one selected from:

a number of products provided to at least one of the plurality of sets of at least one tool; and

- a number of products provided by at least one of the plurality of sets of at least one tool.
- 24. (original) The computer program product of claim22 wherein the production quantity comprises:
- a number of products provided to at least one of the plurality of sets of at least one tool; and
- a number of products provided by at least one of the plurality of sets of at least one tool.
- 25. (original) The computer program product of claim
 22 wherein the production quantity comprises an amount of
 time at least one of the plurality of sets of at least one
 tool takes to process a unit produced by said at least one
 tool.
- 26. (original) The computer program product of claim
 22 wherein the production quantity comprises an average
 amount of time at least one tool in at least one of the
 plurality of sets takes to process a unit produced by said
 at least one tool in the set.
- 27. (original) The computer program product of claim 22 wherein the production quantity comprises a number of tools in at least one of the plurality of sets of at least one tool responsive to at least one capacity.

- 28. (original) The computer program product of claim
 22 wherein the production quantity comprises a percent of
 utilization of the at least one tool in at least one of the
 plurality of sets.
- 29. (original) The computer program product of claim
 22 wherein the production quantity comprises a number of
 sets performing a same step in the production system in the
 plurality of sets.